REMARKS

The Office Action dated April 10, 2007 has been received and carefully noted. The following Remarks are submitted as a full and complete response thereto. Accordingly, claims 1-60 are currently pending in the application, of which claims 1, 21, 41, and 51 are independent claims.

In view of the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending rejections for the reasons discussed below.

Claims 21-40 and 51-60

Claims 21-40 and 51-60 are rejected under 35 U.S.C. §101 because the claimed invention is allegedly directed to non-statutory subject matter. The Office Action alleges "the apparatus of claims 21-40 and 51-60 are reasonably interpreted as functional descriptive material, per se" (See Office Action on page 2, paragraphs 5 and 6). Applicants respectfully traverse this rejection for at least the following reason.

Applicants respectfully submit that the rejection of claims 21-40 and 51-60 under 35 U.S.C. §101 is improper. The Office Action states

> Claims 21-40 and 51-60 are directed to a network device for controlling a flow of data in a wireless network. However, on page 50, paragraph [0156] of the instant application's specification, the Applicant discloses "The present invention can be implemented totally...through software." Therefore, it appears that the network device would reasonably be interpreted by one of ordinary skill in the art as software, per se. *There is no element positively recited as part of the network device. As such, it believed that the apparatus*

of claims 21-40 and 51-60 are reasonably interpreted as functional descriptive material, per se (See Office Action on page 2, paragraph 6). (*emphasis added*)

Applicants respectfully submit that the Office Action improperly imports claim limitations of one disclosed embodiment described in the specification to limit the scope of the claims (See MPEP §2111.01 II.). The MPEP states that the claims must be "given their broadest reasonable interpretation consistent with the specification." (MPEP §2111) Applicants' specification discloses multiple embodiments, where at least one embodiment describes statutory subject matter pursuant to 35 U.S.C. §101 for the network device of claims 21-40 and 51-60 (See page 50, paragraph [0156]). The Office Action refers to the disclosure stating "Additionally, the present invention can be implemented totally or partially through software" to improperly import claim limitations from the specification to limit the scope of the claims.

Therefore, Applicants respectfully submit that the Office Action's conclusion that "it appears that the network device would reasonably be interpreted by one of ordinary skill in the art as software, per se" is improper and limiting of the claims. Contrary to the Office Action's assertion, Applicants positively recite the elements of the network device of claims 21-40 and 51-60 in the specification on at least page 2, paragraph [0006] to page 50, paragraph [0156].

Accordingly, Applicants respectfully request that the rejection of claims 21-40 and 51-60 under 35 U.S.C. §101 be withdrawn and submit that claims 21-40 and 51-60 are now in condition for allowance.

Claims 1-3, 9, 16-18, 21-23, 29, 36-38, 41-42, 49-52, and 59-60

Claims 1-3, 9, 16-18, 21-23, 29, 36-38, 41-42, 49-52, and 59-60 are rejected under 35 U.S.C. §103(a) as being allegedly unpatentable as obvious over Ichikawa, *et. al.* (U.S. Patent No. 6,307,837) ("Ichikawa") in view of *WaveLink SNC24 Version 4 Copyright 1996-2000* ("WaveLink SNC24") and *WaveLink Mobile Manager Version 5.2 Users Guide Revised 6/18/2002* ("WaveLink Mobile Manager"). Applicants respectfully traverse this rejection for at least the following reasons.

Claims 1-3, 9, and 16-18

Claim 1, upon which claims 2-3, 9, and 16-18 are dependent, recites a process of controlling a flow of data in a wireless network and providing wireless access to the wireless network by wireless devices. The process includes receiving data from a wireless device by a network device through one access point of a plurality of access points in communication with the network device, indicating a client identifier for the wireless device. The process also includes forwarding the client identifier to an authentication server, mediating authentication of the wireless device with the authentication server, evaluating data packets received from portions of the wireless network and from the plurality of access points, and passing the received data packets to portions of the wireless network and to the plurality of access points based on the evaluation of the received data packets. The network device periodically polls for a

status of the wireless device from the access point. The access points and the network device exchange information relating to configuration, status, and client session statuses of the access points through a messaging protocol.

Claims 21-23, 29, and 36-38

Claim 21, upon which claims 22-23, 29, and 36-38 are dependent, recites a network device for controlling a flow of data in a wireless network and providing wireless access to the wireless network by wireless devices. The network device includes receiving means for receiving data from a wireless device by the network device through one access point of a plurality of access points in communication with the network device, indicating a client identifier for the wireless device. The network device also includes forwarding means for forwarding the client identifier to an authentication server, mediating means for mediating authentication of the wireless device with the authentication server, evaluating means for evaluating data packets received from portions of the wireless network and from the plurality of access points, and passing means for passing the received data packets to portions of the wireless network and to the plurality of access points based on the evaluation of the received data packets. The network device is configured to periodically poll for a status of the wireless device from the access point. The access points and the network device exchange information relating to configuration, status, and client session statuses of the access points through a messaging protocol.

Claims 41-42 and 49-50

Claim 41, upon which claims 42 and 49-50 are dependent, recites a process of controlling a flow of data in a wireless network in an enterprise environment and providing wireless access to the wireless network by wireless devices. The process includes receiving data from a wireless device by a network device through one access point of a plurality of access points in communication with the network device, indicating a client identifier for the wireless device. The process also includes forwarding the client identifier to an authentication server, mediating authentication of the wireless device with the authentication server, evaluating data packets received from portions of the wireless network and from the plurality of access points, and passing the received data packets to portions of the wireless network and to the plurality of access points based on the evaluation of the received data packets. The network device periodically polls for a status of the wireless device from the access point. The access points and the network device exchange information relating to configuration, status, and client session statuses of the access points through a messaging protocol.

Claims 51-52 and 59-60

Claim 51, upon which claims 52 and 59-60 are dependent, recites a network device for controlling a flow of data in a wireless network in an enterprise environment and providing wireless access to the wireless network by wireless devices. The network

device includes receiving means for receiving data from a wireless device by the network device through one access point of a plurality of access points in communication with the network device, indicating a client identifier for the wireless device. The network device also includes forwarding means for forwarding the client identifier to an authentication server, mediating means for mediating authentication of the wireless device with the authentication server, evaluating means for evaluating data packets received from portions of the wireless network and from the plurality of access points, and passing means for passing the received data packets to portions of the wireless network and to the plurality of access points based on the evaluation of the received data packets. The network device is configured to periodically poll for a status of the wireless device from the access point. The access points and the network device exchange information relating to configuration, status, and client session statuses of the access points through a messaging protocol.

As will be discussed below, Ichikawa in view of WaveLink SNC24 and WaveLink Mobile Manager fails to disclose or suggest every element of the claims, and therefore fails to provide the features discussed above.

Ichikawa discloses a method and base station for packet transfer to resolve the problem of fraudulent access to user LANs through falsified source addresses so that only pre-registered terminals are permitted to transfer packets with specific data networks. The base station includes a packet network which receives a data packet from an

authorized packet terminal, decodes an encrypted data packet, detects tampering in the encrypted data packet, checks the identity of a source address and an identifier encrypted in the data packet, and sends the data packet to a destination address if the identity is registered (Abstract; col. 3, line 12 to col. 6, line 2).

WaveLink SNC24 is a first Spectrum24 software-based network controller for Windows NT and Windows 95/98, which allows a user to configure and manage the Spectrum24 network remotely from any Window host on the network. The WaveLink SNC24 provides recognition of Access Points on the network and a direct administrative interface to each Access Point (page 14: *Agent Based Administration*).

WaveLink Mobile Manager is a remote deployment, management, and security tool for wireless networks providing a common interface for Access Point configuration. Similar to the WaveLink SNC24, the WaveLink Mobile Manager provides recognition of Access Points on a network and a direct administrative interface to each Access point (page 3: *About WaveLink Mobile Manager*; page 4*: Agent-based Administration*).

The Office Action fails to establish a *prima facie* case of obviousness. Assuming *arguendo* that the prior art elements could be combined, the combination of Ichikawa, WaveLink SNC24, and WaveLink Mobile Manager fails to disclose or suggest every element recited in the claimed invention.

As noted by the Office Action, Ichikawa fails to disclose at least "wherein the network device periodically polls for a status of the wireless device from the access point, and wherein the access points and the network device exchange information relating to

configuration, status, and client session statutes of the access points though a messaging protocol" as recited in claim 1 (See Office Action on page 5).

WaveLink SNC24 and WaveLink Mobile Manager fail to cure the deficiencies of Ichikawa. The Office Action alleges that WaveLink SNC24 at pages 14, 100, 115-117, and 119-121, and WaveLink Mobile Manager at pages 18-20, 55, and 113-124 disclose the aforementioned claim elements. Applicants respectfully disagree.

Specifically, the combination of Ichikawa, WaveLink SNC24, and WaveLink Mobile Manager fail to disclose or suggest at least "wherein the network device *periodically polls for a status of the wireless device* from the access point" as recited in claim 1 (*emphasis added*).

WaveLink SNC24

WaveLink SNC24 discloses server-based "Agent" software which actively monitors the local network segment for Access Point specific multi-casts. The WaveLink SNC24's unique AutoDiscovery™ technology automatically recognizes the presence of Access Points on the network and provides a direct administrative interface to each individual Access Point. WaveLink SNC24 also discloses that the Spectrum24 "Agent" may query the network at a frequency of two-minute intervals (See page 14). Hence, the "Agent" software merely queries the network for the presence of Access Points at regular intervals. However, WaveLink SNC24 makes no mention that "the network device

periodically polls for a status of the wireless device from the access point" as recited in claim 1.

WaveLink SNC24 further discloses that each Access Point may store network information, such as statistical data and configuration settings, within individual Management Information Base files, which are periodically updated based upon an Access Point Query time (See page 100). However, WaveLink SNC24 makes no mention that the "network device periodically polls for a status of the wireless device from the access point."

WaveLink SNC24 discloses that the WaveLink SNC24 will automatically detect and add any mobile units active on the network (See page 115-117). However, WaveLink SNC24 makes no mention that "the network *periodically polls for a status of the wireless device* from the access point" as recited in claim 1. (*emphasis added*)

Thus, Applicants respectfully disagree with the Office Action's assertion that WaveLink SNC24 discloses the aforementioned claim elements (See Office Action on page 6). Accordingly, Applicants submit that WaveLink SNC24 fails to disclose or suggest every claimed feature recited in claim 1.

WaveLink Mobile Manager

WaveLink Mobile Manager discloses an Administrator including a Network Tree Window which displays a wireless network in a tree format. The tree format represents, in near real-time, the hierarchal relationships between the different devices on the

network. By expanding or collapsing a branch of the network, a user can control how much of the network the user is able to view at a given time, e.g. expanding a branch where an Agent resides reveals any Access Points connected to that Agent (See page 18). Hence, a user may control the graphical interface of the elements of a network by expanding a branch where an Agent resides to reveal any Access Points connected to that Agent. However, WaveLink Mobile Manager makes no mention that the "network device periodically polls for a status of the wireless device from the access point."

WaveLink Mobile Manager further discloses the functionality to configure basic system settings for an Access Point, such as "Access Control" to limit association to the Access Point based on a MAC address, "Agent Ad Interval" to assign an interval, in seconds, at which third-party mobility agents send mobility agent advertisements, and "AP State Exchange Enable" to enable Access Points to exchange status information using WNMP (See page 55). However, WaveLink Mobile Managers makes no mention that the "network device periodically polls for a status of the wireless device from the access point."

WaveLink Mobile Manager further discloses "Statistical Alerts" to instruct Agents at each site to monitor a specific statistical value of an Access Point (See page 113-124). Hence, the Agent is generating a statistical alert during specific time periods to monitor a specific statistical value of an Access Point. However, WaveLink Mobile Managers makes no mention that the "network device periodically polls for a status of the wireless device from the access point."

Thus, Applicants respectfully disagree with the Office Action's assertion that WaveLink Mobile Manager discloses the aforementioned claim elements (See Office Action on page 6). Accordingly, Applicants submit that WaveLink Mobile Manager fails to disclose or suggest every claimed feature recited in claim 1.

Therefore, WaveLink SNC24 and WaveLink Mobile Manager fail to cure the deficiencies of Ichikawa. Accordingly, Ichikawa in view of WaveLink SNC24 and WaveLink Mobile Manager fails to disclose or suggest every claimed element recited in claim 1.

For similar reasons noted above with respect to claim 1, Ichikawa in view of WaveLink SNC24 and WaveLink Mobile Manager fails to disclose or suggest every element of claims 21, 41, and 51. Claims 2-3, 9, 16-18, 22-23, 29, 36-38, 42, 49-50, 52, and 59-60 are dependent upon claims 1, 21, 41, and 51, respectively. Accordingly, claims 2-3, 9, 16-18, 22-23, 29, 36-38, 42, 49-50, 52, and 59-60 should be allowed at least for their dependency upon allowable base claims, 1, 21, 41, and 51, respectively, and for the specific limitations recited therein.

Therefore, Applicants respectfully request that the rejection of claims 1, 21, 41, and 51, and all claims that depend therefrom, be withdrawn. Accordingly, claims 1, 21, 41, and 51, and all claims that depend therefrom, are in condition for allowance.

Claims 10-12, 30-32, 47, and 57

Claims 10-12, 30-32, 47, and 57 are rejected under 35 U.S.C. §103(a) as being allegedly unpatentable as obvious over Ichikawa in view of WaveLink SNC24 and WaveLink Mobile Manager, and further in view of Awater, *et. al.* (U.S. Patent No. 7,173,918) ("Awater"). Applicants respectfully traverse this rejection for at least the following reasons.

Ichikawa, WaveLink SNC24, and WaveLink Mobile Manager were discussed above.

Awater discloses a communication system with a plurality of access points and at least one network station, where the network station communicates with one of the plurality of access points through a wireless communication protocol. Each access point is able to monitor its access point traffic load and transmit an access point traffic load parameter (ATT) to the network station. The network station is able to monitor its network station traffic load, store a network station traffic load parameter (AUTT), receive ATT from the access points, and select a communication with one of the access points using a predetermined cost function taking ATT and AUTT into account (Abstract).

As noted above with respect to claim 1, Ichikawa in view of WaveLink SNC24 and WaveLink Mobile Manager fails to disclose or suggest every claimed element recited in claims 1, 21, 41, and 51. Awater fails to cure the deficiencies of Ichikawa, WaveLink SNC24, and WaveLink Mobile Manager. Accordingly, Ichikawa in view of WaveLink SNC24, WaveLink Mobile Manager, and Awater fails to disclose or suggest every

claimed element recited in claims 1, 21, 41, and 51. Claims 10-12, 30-32, 47, and 57 are dependent upon claims 1, 21, 41, and 51, respectively. Accordingly, claims 10-12, 30-32, 47, and 57 should be allowed at least for their dependency upon allowable base claims, 1, 21, 41, and 51, respectively, and for the specific limitations recited therein.

Therefore, Applicants respectfully request that the rejection of claims 1, 21, 41, and 51, and all claims that depend therefrom, be withdrawn. Accordingly, claims 1, 21, 41, and 51, and all claims that depend therefrom, are in condition for allowance.

Claims 4, 8, 15, 24, 28, 35, 43, and 53

Claims 4, 8, 15, 24, 28, 35, 43, and 53 are rejected under 35 U.S.C. §103(a) as being allegedly unpatentable as obvious over Ichikawa in view of WaveLink SNC24 and WaveLink Mobile Manager, and further in view of Engler, *et. al.* (U.S. Patent Publication No. 2005/0254652) ("Engler"). Applicants respectfully traverse this rejection for at least the following reasons.

Ichikawa, WaveLink SNC24, and WaveLink Mobile Manager were discussed above.

Engler discloses a method for automatically providing a secure connection between a wireless network including a server and server software installed thereon and a device seeking access to the wireless network. The server software gathers identification information from the device and prompts the user to provide authentication information which is transmitted to the server. If successfully verified, the server stores the

identification and authentication information in an authorized access list, provides a unique encryption key to the requesting device and grants the authenticated user and identified device access to the wireless network (Abstract; page 1, paragraph [0009]).

As noted above with respect to claim 1, Ichikawa in view of WaveLink SNC24 and WaveLink Mobile Manager fails to disclose or suggest every claimed element recited in claims 1, 21, 41, and 51. Engler fails to cure the deficiencies of Ichikawa, WaveLink SNC24, and WaveLink Mobile Manager. Accordingly, Ichikawa in view of WaveLink SNC24, WaveLink Mobile Manager, and Engler fails to disclose or suggest every claimed element recited in claims 1, 21, 41, and 51. Claims 4, 8, 15, 24, 28, 35, 43, and 53 are dependent upon claims 1, 21, 41, and 51, respectively. Accordingly, claims 4, 8, 15, 24, 28, 35, 43, and 53 should be allowed at least for their dependency upon allowable base claims, 1, 21, 41, and 51, respectively, and for the specific limitations recited therein.

Therefore, Applicants respectfully request that the rejection of claims 1, 21, 41, and 51, and all claims that depend therefrom, be withdrawn. Accordingly, claims 1, 21, 41, and 51, and all claims that depend therefrom, are in condition for allowance.

Claims 5, 7, 19, 20, 25, 27, 39, 40, 44, 46, 54 and 56

Claims 5, 7, 19, 20, 25, 27, 39, 40, 44, 46, 54 and 56 are rejected under 35 U.S.C. §103(a) as being allegedly unpatentable as obvious over Ichikawa in view of WaveLink SNC24 and WaveLink Mobile Manager, and further in view of Numminen, *et. al.* (EP

1073294) ("Numminen"). Applicants respectfully traverse this rejection for at least the following reasons.

Ichikawa, WaveLink SNC24, and WaveLink Mobile Manager were discussed above.

Numminen discloses an access control system for controlling access by wireless terminals to a wireless telecommunications network. The access control system includes a database for storing identifies of a set of wireless terminals belonging to the wireless telecommunications network, a configurable store for storing supplementary access values indicative of whether terminals that do not belong to the network may gain access to the network, and an access control unit for receiving an access request message indicating the identity of a wireless terminal and in response to that message accessing the database and/or store to permit the wireless telecommunications network by the wireless terminal if the terminal's identity is present in the database (Abstract; col. 4, paragraph [0025]).

As noted above with respect to claim 1, Ichikawa in view of WaveLink SNC24 and WaveLink Mobile Manager fails to disclose or suggest every claimed element recited in claims 1, 21, 41, and 51. Numminen fails to cure the deficiencies of Ichikawa, WaveLink SNC24, and WaveLink Mobile Manager. Accordingly, Ichikawa in view of WaveLink SNC24, WaveLink Mobile Manager, and Numminen fails to disclose or suggest every claimed element recited in claims 1, 21, 41, and 51. Claims 5, 7, 19, 20, 25, 27, 39, 40, 44, 46, 54 and 56 are dependent upon claims 1, 21, 41, and 51,

respectively. Accordingly, claims 5, 7, 19, 20, 25, 27, 39, 40, 44, 46, 54 and 56 should be allowed at least for their dependency upon allowable base claims, 1, 21, 41, and 51, respectively, and for the specific limitations recited therein.

Therefore, Applicants respectfully request that the rejection of claims 1, 21, 41, and 51, and all claims that depend therefrom, be withdrawn. Accordingly, claims 1, 21, 41, and 51, and all claims that depend therefrom, are in condition for allowance.

Claims 6, 26, 45, and 55

Claims 6, 26, 45, and 55 are rejected under 35 U.S.C. §103(a) as being allegedly unpatentable as obvious over Ichikawa in view of WaveLink SNC24, WaveLink Mobile Manager, and Numminen, and further in view of Engler. Applicants respectfully traverse this rejection for at least the following reasons.

Ichikawa, WaveLink SNC24, WaveLink Mobile Manager, Numminen and Engler were discussed above.

As noted above with respect to claim 1, Ichikawa in view of WaveLink SNC24, WaveLink Mobile Manager, Numminen, and Engler fails to disclose or suggest every claimed element recited in claims 1, 21, 41, and 51. Claims 6, 26, 45, and 55 are dependent upon claims 1, 21, 41, and 51, respectively. Accordingly, claims 6, 26, 45, and 55 should be allowed at least for their dependency upon allowable base claims, 1, 21, 41, and 51, respectively, and for the specific limitations recited therein.

Double Patenting Rejection

Claims 41, 44-45, 47-51, 54-55, and 57-60 are objected to under 37 C.F.R. §1.75 as allegedly being substantial duplicates of claims 1, 5-6, 10, 13, 16-17, 21, 25-26, 30, 33, and 36-37, respectively. Applicants respectfully traverse the claim objections for at least the following reason.

First, Applicants respectfully submit that the claim objections of claims 41, 44-45, 47-51, 54-55, and 57-60 under 37 C.F.R. §1.75 are premature because MPEP §706.03(k) states "when two claims in an application are duplicates, or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other claim under 37 C.F.R. §1.75 as being a substantial duplicate of the allowed claim. Claims 1, 5-6, 10, 13, 16-17, 21, 25-26, 30, 33, and 36-37 have not been indicated as allowable; therefore, the claim objections of claims 41, 44-45, 47-51, 54-55, and 57-60 under 37 C.F.R. §1.75 are premature.

Second, Applicants respectfully submit that claims 41, 44-45, and 47-50 are not substantial duplicates of claims 1, 5-6, 10, 13, and 16-17. Claim 1, and the claims that depend therefrom, recite a process of controlling a flow of data in a wireless network, such as a home, small office, or other non-enterprise environment (See page 2, paragraph [0004-0005] of the specification). Whereas claim 41, and the claims that depend therefrom, provides a preamble that limits the process of the claimed subject matter to a "process of controlling a flow of data in a wireless network in an enterprise environment providing wireless access to the wireless network by wireless devices." Therefore,

claims 41, 44-45, and 47-50 are not substantial duplicate claims of claims 1, 5-6, 10, 13, and 16-17.

Similarly, Applicants respectfully submit that claims 51, 54-55, and 57-60 are not substantial duplicates of claims 21, 25-26, 30, 33, and 36-37. Claim 21, and the claims that depend therefrom, recite a network device for controlling a flow of data in a wireless network, such as a home, small office, or other non-enterprise environment (See page 2, paragraph [0004-0005] of the specification). Whereas claim 51, and the claims that depend therefrom, provides a preamble that limits the structure of the claimed subject matter to a "network device for controlling a flow of data in a wireless network in an enterprise environment providing wireless access to the wireless network by wireless devices." Therefore, claims 51, 54-55, and 57-60 are not substantial duplicate claims of claims 21, 25-26, 30, 33, and 36-37.

Accordingly, Applicants respectfully request that the objection of claims 41, 44-45, 47-51, 54-55, 57-60 under 37 C.F.R. §1.75 be withdrawn and submit that claims 1, 5-6, 10, 13, 16-17, 21, 25-26, 30, 33, 36-37, 41, 44-45, 47-51, 54-55, and 57-60 are in condition for allowance.

CONCLUSION

Therefore, Applicant respectfully submits that Ichikawa, WaveLink SNC24, WaveLink Mobile Manager, Numminen, and Engler fail to disclose or suggest every claimed element recited in claims 1-60. The distinctions previously noted are more than sufficient to render the claimed invention unobvious. It is therefore respectfully requested that all of claims 1-60 be allowed, and this application passed to issuance.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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